A New Approach for Object Recognition Engine in Robotics

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***Abstract*—**

I. Introduction

3D point cloud data provided by low-cost RGB-D sensors [1], has allowed for the collection of feature rich datasets. These widely available sensors provide synchronized color and depth images and are increasingly being used in robotic applications such as object detection and classification. Although these datasets have opened new avenues of research, it remains undetermined as to which feature descriptors and machine learning classifiers provide optimal object recognition performance.

The remainder of this paper is organized as follows. Related work is mentioned in Section II. In Section III, we state the problem and provide our solution. Experimental results are presented and discussed in IV. We conclude in Section V with an outlook of ongoing and future work.

II. Related Work

III. Problem Statement

IV. Experimental Results

V. Conclusion and Future Outlook

References

[1] Kinect, 2015. [Online]. Available: http://www.xbox.com/en-US/xbox-one/accessories/kinect-for-xbox-one